



Joseph E. Kernan  
Governor

Lori F. Kaplan  
Commissioner

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Indianapolis, Indiana 46206-6015  
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(800) 451-6027  
[www.in.gov/idem](http://www.in.gov/idem)

TO: Interested Parties / Applicant

RE: Whirlpool Corporation / SPM 163-18065-00022

FROM: Paul Dubenetzky  
Chief, Permits Branch  
Office of Air Quality

### **Notice of Decision: Approval – Effective Immediately**

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this permit modification is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of a Title V operating permit or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency  
401 M Street  
Washington, D.C. 20406

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

**December 31, 2003**

Mr. Paul Coburn  
Whirlpool Corporation  
5401 U.S. 41 North  
Evansville, Indiana 47727

Re: 163-18065  
2<sup>nd</sup> Significant Permit Modification to:  
Part 70 permit No.: T163-7467-00022

Dear Mr. Coburn:

Whirlpool Corporation was issued a Part 70 operating permit T163-7467-00022 on July 13, 1999 for a refrigerator and ice makers manufacturing plant. A letter requesting changes to this permit was received on August 11, 2003. Pursuant to the provisions of 326 IAC 2-7-12 a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of incorporating the changes permitted in Significant Source Modification 163-18031, which consists of the following.

- (a) One (1) existing natural gas-fired boiler (Boiler No. 5), with the capability to burn no. 2 fuel oil as back-up, identified as EU7, rated at ninety-two and seven-tenths million British thermal units per hour (92.7 MMBtu/hr), and exhausting to stack S7. (Inst. 1973, mod. 1997).
- (b) Proposed installation of one (1) aboveground horizontal fixed-roof distillate fuel oil storage tank, identified as Oil Tank 1 (OT01) with a capacity of 15,000 gallons.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Aida De Guzman, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call at (800) 451-6027, press 0 and ask for extension (3-4972), or dial (317) 233-4972.

Sincerely,

Original signed by Paul Dubenetzky  
Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

Attachments

APD

cc: File -Vanderburgh County  
Vanderburgh County Health Department  
Evansville EPA  
Southwest Regional Office  
Air Compliance Section Inspector - Scott Anslinger  
Compliance Data Section - Karen Nowak  
Administrative and Development  
Technical Support and Modeling - Michele Boner

**PART 70 OPERATING PERMIT**  
**OFFICE OF AIR QUALITY**  
**AND**  
**CITY OF EVANSVILLE ENVIRONMENTAL PROTECTION AGENCY**

**Whirlpool Corporation, Evansville Division**  
**5401 U.S. 41 North**  
**Evansville, Indiana 47727**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T163-7467-00022	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: July 13, 1999
First Administrative Amendment 163-11817, issued on April 27, 2000; Reopening 163-13511, issued on February 7, 2002; Second Administrative Amendment 163-13859, issued on March 14, 2001; Third Administrative Amendment 163-15849, issued May 3, 2002; Fourth Administrative Amendment 163-15738, issued on July 2, 2002; Fifth Administrative Amendment 163-16495, issued on September 4, 2002; and First Significant Permit Modification 163-16557, issued on December 12, 2002	
Second Significant Permit Modification 163-18065	Pages Affected: 6, 35, 36, 37, 38, 50, 51 Pages Added: 38a, 51a
Issued by: Original signed by Paul Dubenetzky Paul Dubenetzky, Chief Permit Branch Office of Air Quality	Issuance Date: December 31, 2003

## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and City of Evansville Environmental Protection Agency. The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

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The Permittee owns and operates a stationary household refrigerators and ice makers manufacturing plant.

Responsible Official: Paul Coburn  
Source Address: 5401 U.S. 41 North, Evansville, Indiana 47727  
Mailing Address: 5401 U.S. 41 North, Evansville, Indiana 47727  
SIC Code: 3632 and 3585  
County Location: Vanderburgh County  
County Status: Attainment or Unclassifiable for all criteria pollutants  
Source Status: Part 70 Permit Program  
Major Source, under PSD  
Major Source, Section 112 of the Clean Air Act

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) Small Parts/Door Paint Line (metal parts are being coated), identified as EU3, with a maximum capacity of seven-hundred and twenty-five units per hour (725 units/hr), using baffles and dry filters as control, and exhausting to stacks S3-1 through S3-10. This process consist of six (6) paint areas and one (1) paint bake oven rated at ten million British thermal units per hour (10 MMBtu/hr).
- (b) One (1) natural gas fired boiler (Boiler No. 2), identified as EU4, rated at eighty-five million British thermal units per hour (85 MMBtu/hr), and exhausting to stack S4.
- (c) One (1) existing natural gas-fired boiler (Boiler No. 5), with the capability to burn no. 2 fuel oil as back-up, identified as EU7, rated at ninety-two and seven-tenths million British thermal units per hour (92.7 MMBtu/hr), and exhausting to stack S7. (Inst. 1973, mod. 1997).
- (d) One (1) natural gas fired boiler (Boiler No. 3) with the capability to burn No. 2 distillate fuel oil as back-up, identified as EU12, rated at thirty-three and five-tenths million British thermal units per hour (33.5 MMBtu/hr), and exhausting to stack S12.
- (e) One (1) Thermoplastic Liner System, identified as EU1, with a maximum usage of eleven-thousand pounds per hour (11,000 lb/hr) of raw material, and exhausting to stack S1-1.
- (f) One (1) Expanded Polystyrene Process, identified as F12, with a maximum usage of five-hundred pounds per hour (500 lb/hr) of raw material, and exhausting to room.
- (g) Proposed installation of one (1) aboveground horizontal fixed-roof distillate fuel oil storage

tank, identified as Oil Tank 1 (OT01) with a capacity of 15,000 gallons.

## SECTION D.2 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]:

- (b) One (1) natural gas fired boiler (Boiler No. 2), identified as EU4, rated at eighty-five million British thermal units per hour (85 MMBtu/hr), and exhausting to stack S4. (August 1988)
- (c) One (1) existing natural gas-fired boiler (Boiler No. 5), with the capability to burn no. 2 fuel oil as back-up, identified as EU7, rated at ninety-two and seven-tenths million British thermal units per hour (92.7 MMBtu/hr), and exhausting to stack S7. (Inst. 1973, mod. 1997).
- (d) One (1) natural gas fired boiler (Boiler No. 3) with the capability to burn No. 2 distillate fuel oil as back-up, identified as EU12, rated at thirty-three and five-tenths million British thermal units per hour (33.5 MMBtu/hr), and exhausting to stack S12. (Inst. 1997)
- (g) Proposed installation of one (1) aboveground horizontal fixed-roof distillate fuel oil storage tank, identified as Oil Tank 1 (OT01) with a capacity of 15,000 gallons.

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.2.1 Particulate Matter (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (PM Emission Limitations for Source of Indirect Heating, constructed after September 21, 1983), the allowable PM emission rate from the 85 mmBtu/hr Boiler No. 2, 92.7 mmBtu/hr Boiler No. 5, and 33.5 natural gas shall not exceed twenty-seven hundredths (0.27) pounds per million British thermal units (lb/MMBtu).

This limitation is based on the following equation:

$$Pt = 1.09 / ( Q^{0.26} ) = 0.27 \text{ lb/MMBtu heat input}$$

where Pt = rate of emission in pounds per MMBtu heat input.  
Q = total source maximum operating capacity in MMBtu/hr  
Q = (85+33.5+92.7) = 211.2 MMBtu/hr

#### D.2.2 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-1]

Pursuant to 326 IAC 7-1.1 (SO<sub>2</sub> Emissions Limitations) the SO<sub>2</sub> emissions from the 92.7 MMBtu/hr natural gas fired boiler (Boiler No. 5), and the 33.5 mmBtu/hr natural gas-fired boiler (Boiler No.3) when burning No. 2 distillate fuel oil, shall not exceed five-tenths (0.5) pounds per million Btu of heat input

#### D.2.3 PSD Minor Modification Limit [326 IAC 2-2]

- (a) Pursuant to CP-163-8917-00022, issued on December 23, 1997, the input of fuel oil No. 2 to the 33.5 MMBtu/hr boiler (Boiler No. 3) shall be limited to 1,100,000 gallons per twelve consecutive month period, with compliance demonstrated at the end of each month. This fuel usage limitation is equivalent to SO<sub>2</sub> emissions of 39 tons per twelve consecutive month period. Compliance with this limit shall make 326 IAC 2-2, Prevention of Significant Deterioration (PSD) not applicable.
- (b) The input of natural gas fuel to the 92.7 MMBtu/hr Boiler No. 5, when using only this fuel shall be limited to less than 547 million cubic feet (MMCF) per twelve consecutive month period, with compliance demonstrated at the end of each month. This input fuel limitation shall restrict the Oxides of Nitrogen (NO<sub>x</sub>) emissions to less than 49.24 tons per twelve month period. Compliance with this limit shall make 326 IAC 2-2, Prevention of Significant Deterioration (PSD) not applicable.
- (c) The input fuel oil No. 2 to the 92.7 MMBtu/hr Boiler No. 5 shall be limited to less than 1,126,000 gallons (1,126 kgal) per twelve consecutive month period, with compliance demonstrated at the end of each month. This input fuel oil limit shall be based on a limit of 0.5% sulfur content of the fuel oil. This input fuel limitation shall restrict the Sulfur Dioxide

(SO<sub>2</sub>) emissions to less than 40 tons per twelve month period. Compliance with this limit shall make 326 IAC 2-2, Prevention of Significant Deterioration (PSD) not applicable.

**D.2.4 New Source Performance Standard (NSPS) [326 IAC 12 and 40 CFR 60]**

- (a) Pursuant to 326 IAC 12 and 40 CFR 60.42c(d), the owner or operator of the 33.5 MMBtu/hr boiler (Boiler No. 3) and the 92.7 MMBtu/hr boiler (Boiler No. 5) shall not discharge into the atmosphere SO<sub>2</sub> in excess of 0.5 pounds per million Btu heat input or, as an alternative, shall not combust in the boiler No. 2 distillate fuel oil that contains greater than 0.5 weight percent sulfur. If the owner or operator elects to demonstrate compliance with the sulfur content limit using fuel analysis, operation condition D.2.8 must be met;
- (b) Pursuant to Section 60.42c(i), Standard for Sulfur Dioxide, the SO<sub>2</sub> emission limits, and fuel oil sulfur limits, under this section shall apply at all times, including periods of startup, shutdown, and malfunction.

**D.2.5 New Source Performance Standard (NSPS) [326 IAC 12 and 40 CFR 60, Subpart Dc]**

Pursuant to Section 60.43c(c), Standards for Particulate matter, the owner or operator of the 92.7 mmBtu/hr Boiler No. 5 and the 33.5 mmBtu/hr Boiler No.3 shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. The PM and opacity standards under this section shall apply at all times, except during periods of startup, shutdown, or malfunction.

**D.2.6 New Source Performance Standard (NSPS) [326 IAC 12 and 40 CFR 60, Subpart Kb]**

Pursuant to 326 IAC 12 and 40 CFR Part 60.110b, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels), the owner or operator of one (1) aboveground horizontal fixed-roof distillate (No. 2) fuel oil storage tank, identified as Oil Tank 1 (OT01) shall: (a) keep readily accessible records showing the dimension of the storage tank and an analysis showing the capacity; and (b) keep records required in (a) of this condition for the life of the tank.

**Compliance Determination Requirements**

**D.2.7 Testing Requirements [326 IAC 2-7-6(1),(6)]**

Except as provided by Condition D.2.10, this permit does not require a performance testing. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the Particulate Matter, NO<sub>x</sub> or SO<sub>2</sub> limits specified in Conditions D.2.1, D.2.2, D.2.3, and D.2.4 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

**D.2.8 SO<sub>2</sub> and NO<sub>x</sub> Emission Limit (Prevention of Significant Deterioration (PSD)) [326 IAC 2-2]**

The natural gas and fuel oil No. 2 used by the 92.7 MMBtu/hr Boiler No. 5, and the 33.5 mmBtu/hr Boiler No.3 shall have the following fuel equivalency:

- (a) For every one thousand gallons (1 kgal) of fuel oil no. 2 with any sulfur content burned, shall be equivalent to 0.156 million cubic feet of natural gas.
- (b) For every ten thousand gallons (10 kgal) of fuel oil no. 2 with sulfur content of 0.05%, shall be equivalent to one (1) kgal of fuel oil no. 2 with sulfur content of 0.5%.
- (c) For every one thousand gallons (1 kgal) of fuel oil with sulfur content of 0.5% burned, shall be equivalent to an amount of fuel oil with sulfur content less than 0.5% but greater than 0.05% based on the following equivalency calculations:

$$\frac{71 \text{ lb}}{\text{kgal F.O. 0.5\%}} \times \frac{\text{kgal F.O. x\%}}{142 \text{ S lb}} = \frac{\# \text{ kgal F.O. x\%}}{\text{kgal 0.5\%}}$$

- (d) Compliance with sections (a) through (c) of this condition, and Condition D.2.3 shall make 326 IAC 2-2, Prevention of Significant Deterioration (PSD) not applicable.

#### D.2.9 Sulfur Dioxide Emissions and Sulfur Content

Compliance shall be determined utilizing one of the following options.

- (a) Pursuant to Section 60.44c of NSPS Subpart Dc and 326 IAC 3-7-4, the Permittee shall demonstrate that the fuel oil sulfur content does not exceed five-tenths percent (0.5%) by weight by:
- (1) Providing vendor analysis of fuel delivered, if accompanied by a certification only for the initial tank of oil; Thereafter, the owner or operator shall;
  - (2) Analyze the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
    - (A) Oil samples shall be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
    - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the ninety-two and seven-tenths million British thermal units per hour (92.7 MMBtu/hr) heat input boiler, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

#### D.2.10 NSPS Testing Requirement

Pursuant to the NSPS, Subpart Dc, a compliance opacity test shall be performed on the 92.7 mmBtu/hr Boiler No. 5 within 60 days after burning No. 2 fuel oil as the back-up fuel. This test shall be performed according to 326 IAC 3-2.1 (Source Sampling Procedures) using the methods specified in the rule. This performance test shall be conducted in accordance with Section C - Performance Testing.

### Compliance Monitoring Requirements [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

#### D.2.11 Visible Emissions Notations

- (a) Daily visible emission notations of the Boiler No. 3 and Boiler No. 5 stacks exhaust shall be performed during normal daylight operations when burning fuel oil and exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

**D.2.12 Record Keeping Requirements**

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- (a) Pursuant to 40 CFR Part 60.48c, and to document compliance with Condition D.2.1 and D.2.2, the Permittee shall maintain records in accordance with (1) through (3) below.
  - (1) Calendar dates covered in the compliance determination period;
  - (2) Each 30-day average SO<sub>2</sub> emission rate (nj/J or lb/ million Btu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.
  - (3) Records of fuel supplier certification as described below:
    - (A) The name of the oil supplier; and that the oil complies with the specifications under the definition of distillate oil in 40 CFR Part 60.41c.

In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period. Fuel supplier certification shall include the following information:

  - (A) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
  - (B) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period;
- (b) Pursuant to 40 CFR Part 60.7, the Permittee shall maintain records of occurrences and duration of any startup, shutdown, or malfunction in the operation of Boilers No.3 and No. 5.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**D.2.13 Reporting Requirements**

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- (a) A quarterly report of item (1) below to document compliance with Condition D.2.3, shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or their equivalent.
  - (1) Natural gas and the fuel oil no.2 consumption for Boilers no. 3 and No. 5. This report

shall be submitted within thirty (30) days after the end of the quarter being reported.

- (b) To document compliance with Operation Condition D.2.2, item (1) through (3) below shall be submitted upon request to the address listed in Section C - General Reporting Requirements, within thirty (30) days after the day of the request.
  - (1) Calendar month average sulfur content on the fuel oil no. 2 as determined in the fuel mixture.
  - (2) Calendar month average heating value of the fuel oil no. 2 used.
  - (3) Calendar month average sulfur dioxide emission rate in pounds per million Btu.
- (c) The owner or operator of Boiler No. 5 subject to the SO<sub>2</sub> emission limits and fuel oil sulfur limits, shall submit quarterly reports to the Administrator. Under Sec. 60.43c the owner or operator of the boiler shall keep records and submit reports by the 30<sup>th</sup> day following the end of the reporting period, which shall include the following information, as applicable:
  - (1) Calendar dates covered in the reporting period.
  - (2) Each 30-day average SO<sub>2</sub> emission rate (nj/J or lb/ million Btu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.
  - (3) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described in item (1) and (2) below, must be reported. In addition the records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period. Fuel supplier certification shall include the following information:
    - (A) The name of the oil supplier; and
    - (B) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in Sec. 60.41c.
- (d) All records required under this Operation Condition D.2.10 shall be maintained by the owner or operator of the affected facility for a period of five (5) years following the date of such record. All reports shall be submitted to the Administrator and shall be postmarked by the 30<sup>th</sup> day following the end of the reporting period.
- (e) Unless otherwise specified in this permit, any notice, report, or other submissions required by this permit shall be timely if:
  - (1) Postmarked on or before the date it is due; or
  - (2) Delivered by any other method if it is received and stamped by IDEM, OAM, and Evansville EPA, on or before the date it is due.
- (f) All instances of deviations from any requirements of this permit must be clearly identified in such reports.
- (g) Any corrective actions taken as a result of an exceedance of a limit, an excursion from the parametric values, or a malfunction that may have caused excess emissions must be clearly identified in such reports.

- (h) The Permittee shall certify, on the form provided, if natural gas was fired in Boiler No. 5 at all times during the report period. This certification shall be included when submitting the Annual Compliance Certification Letter.

**Indiana Department of Environmental Management**  
**Office of Air Quality**

Addendum to the  
Technical Support Document for a Significant Source and Permit Modifications to a Part  
70 Operating Permit

Source Name: Whirlpool Corporation, Evansville Division  
Source Address: 5401 U.S. 41 North, Evansville, Indiana 47727  
Mailing Address: 5401 U.S. 41 North, Evansville, Indiana 47727  
County: Vanderburgh  
SIC Code: 3632, 3585  
Significant Source Modification: 163-18031-00022  
Significant Permit Modification: 163-18065-00022  
Operation Permit No.: T 163-7467-00022  
Permit Reviewer: Aida De Guzman

On October 10, 2003, the Office of Air Quality (OAQ) had a notice published in the Evansville Courier, Evansville, Indiana, stating that Whirlpool Corporation had applied for a Significant Source Modification and Significant Permit Modification to the Part 70 Operating Permit for the modification of the existing 92.7 million British thermal unit/hr natural gas-fired Boiler No. 5 to have the capability to burn fuel oil no. 2. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the draft permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On November 3, 2003, Whirlpool Corporation submitted the following comments to the draft permit (additions are **bolded** and deletions are ~~struck-through~~ for emphasis).

Comment 1: Whirlpool Corporation prefers to monitor annual Boiler No.5 compliance using calculated SO<sub>2</sub> and NO<sub>x</sub> emission rates rather than having fuel usage restrictions. The source believes that the fuel equivalency calculations given as draft conditions in each permit and described in the respective Technical Support Document do not fully meet their stated intent that is, to ensure the proposed Boiler No. 5 change is a minor modification and not subject to review under 326 IAC 2-2, Prevention of Significant Deterioration (PSD). It appears that the fuel equivalency factors reflected in Condition D.2.8 are based solely on SO<sub>2</sub> emissions as the limiting factor. The source believes that the use of SO<sub>2</sub> emission criteria alone does not accurately reflect the relationship between natural gas and fuel oil usage. The fuel equivalency calculations between natural gas and fuel oil (at any sulfur content) must also account for the NO<sub>x</sub> emissions as limiting factor. The source is concerned however that the equivalency calculations do not accurately reflect an annual operating scenario where both natural gas and fuel oil are burned in Boiler No.5 while ensuring that the allowable NO<sub>x</sub> emission is not exceeded.

The source also requested that the following equivalency be added when the source is using fuel oil no. 2 with sulfur content less than 0.5% but greater than 0.05%:

- (a) For every one thousand gallons (1kgal) of fuel oil with sulfur content of 0.5% burned, shall be equivalent to an amount of fuel oil with sulfur content less than 0.5% but greater than 0.05% based on the following:

Amount of oil allowed (kgal) = 1 kgal x (X % sulfur content /0.5% sulfur content)

Response 1: "The appropriate means of restricting potential to emit through permit conditions has been an issue in several enforcement cases. IDEM, OAQ uses these cases and EPA guidance in limiting the potential to emit. To appropriately limit potential to emit consistent with the opinion in Louisiana-Pacific, permits issued pursuant to 326 IAC 2-2, production or operational limitation must be stated as conditions that can be enforced independently of one another. As an example in this EPA guidance, restrictions on fuel which relates to both type and amount of fuel combusted should state each as an independent condition in the permit. This is necessary for purposes of practical enforcement so that, if one of the conditions is found to be difficult to monitor for any reason, the other may still be enforced".

IDEM, OAQ agrees that although the natural gas fuel is limited in order to restrict the NOx emissions, fuel oil no. 2 usage (at any sulfur content) equivalent into natural gas should also be established. The fuel oil no. 2 fuel equivalency is as follows:

Fuel Equivalency When Limiting the NOx Emissions:

$$28 \text{ lb/kgal F.O.2} * \text{MMCF N.G./180 lb} = 0.156 \text{ MMCF N.G./kgal F.O. 2}$$

Since 0.155 MMCF N.G./kgal F.O. 2 equivalency based on NOx limit is more stringent, it shall overrule the following equivalency based on the SO2 limit:

Fuel Equivalency When Limiting the SO2 Emissions:

**Fuel (Natural Gas and Fuel Oil No. 2) Equivalency:**

Using 0.5% Sulfur Content Fuel Oil No. 2 (F.O. 2):

$$71 \text{ lb/kgal} * \text{MMCF/0.6 lb} = \frac{118 \text{ MMCF of N.G.}}{\text{Kgal of F.O.2}}$$

Using 0.05% Sulfur Content of Fuel Oil (F.O.2):

$$7.1 \text{ lb/kgal} * \text{MMCF/0.6 lb} = \frac{11.8 \text{ MMCF of N.G.}}{\text{Kgal of F.O.2}}$$

When the source is using fuel oil no. 2 with sulfur content less than 0.5% but greater than 0.05%, the fuel equivalency shall be calculated as follows:

$$\frac{71 \text{ lb}}{\text{kgal 0.5\%}} * \frac{\text{kgal F.O. x\%}}{142 \text{ S}} = \frac{\# \text{ kgal F.O. x\%}}{\text{kgal 0.5\%}}$$

This equivalency will be added as a note in the SO2 limit reporting forms.

Condition D.2.8 will be modified as follows:

**D.2.8 SO2 and NOx Emission Limit (Prevention of Significant Deterioration (PSD)) [326 IAC 2-2]**

The natural gas and fuel oil No. 2 used by the 92.7 MMBtu/hr Boiler No. 5, and the 33.5 mmBtu/hr Boiler No.3 shall have the following fuel equivalency:

- (a) ~~For every 118 million cubic feet of natural gas burned, shall be equivalent to one (1) kgal of fuel oil no. 2 with sulfur content of 0.5%. For every one thousand gallons (1 kgal) of~~

**fuel oil no. 2 with any sulfur content burned, shall be equivalent to 0.156 million cubic feet of natural gas.**

~~(b) For every 11.8 million cubic feet of natural gas burned, shall be equivalent to one (1) kgal of fuel oil no. 2 with sulfur content of 0.05%~~

(eb) For every **ten thousand 40,000 gallons** (10 kgal) of fuel oil no. 2 with sulfur content of 0.05%, shall be equivalent to one (1) kgal of fuel oil no. 2 with sulfur content of 0.5%.

(c) **For every one thousand gallons (1 kgal) of fuel oil with sulfur content of 0.5% burned, shall be equivalent to an amount of fuel oil with sulfur content less than 0.5% but greater than 0.05% based on the following equivalency calculations:**

$$\frac{71 \text{ lb}}{\text{kgal F.O. 0.5\%}} * \frac{\text{kgal F.O. x\%}}{142 \text{ S lb}} = \frac{\# \text{ kgal F.O. x\%}}{\text{kgal 0.5\%}}$$

(d) Compliance with sections (a) through (c) of this condition, and Condition D.2.3 shall make 326 IAC 2-2, Prevention of Significant Deterioration (PSD) not applicable.

The following report form shall replace the proposed NOx report form for Boiler No. 5:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION  
AND  
CITY OF EVANSVILLE ENVIRONMENTAL PROTECTION AGENCY**

**Part 70 Quarterly Report**

**Source Name:** Whirlpool Corporation  
**Source Address:** 5401 U.S. 41 North, Evansville, Indiana 47727  
**Mailing Address:** 5401 U.S. 41 North, Evansville, Indiana 47727  
**Part 70 Permit No.:** T163-7467-00022  
**Facility:** 92.7 million Btu per hour Boiler No. 5 (ID# EU-7)  
**Parameter:** NOx  
**Limit:** 547 MMCF of natural gas per twelve consecutive month period

Month	Fuel Type	Fuel Oil No. 2 Usage This Month	Fuel Oil No. 2 Equivalent Into Natural Gas Usage This Month	TOTAL Natural Gas & Equivalent Fuel Usage This Month	Fuel Oil No. 2 Usage for Previous 11 Months (kgal)	Fuel Oil No. 2 Equivalent Into Natural Gas Usage for Previous 11 Months (kgal)	TOTAL Natural Gas & Equivalent Fuel Usage for Previous 11 Months (kgal)	Fuel Oil No. 2 Usage 12 Month Total	Fuel Oil No. 2 Equivalent Into Natural Gas Usage 12 Month Total	TOTAL Natural Gas & Equivalent Fuel Usage 12 Month Total
1										
2										
3										

**Note:** Sulfur content of the fuel oil is not considered when doing the equivalency for natural gas.

**Equivalency for fuel oil no. 2 into natural gas:**

$$28 \text{ lb/kgal F.O.2} * \text{MMCF N.G./180 lb} = 0.156 \text{ MMCF N.G./kgal F.O. 2}$$

**Submitted by:** \_\_\_\_\_

**Title/Position:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

Comment 2: The second issue involves the overall timing of the modification to Boiler No.5. As written, the permits simply imply that the Boiler No.5 modification will take place immediately upon issuance of the final permits. Due to economic conditions and budgetary constraints, the source may not make the changes to this boiler for several months to a year and a half from the permit issuance date.

Response 2: While the permit is effective upon issuance, it is clear that its provisions apply only upon commencement of (construction of oil related facilities or equipment) and burning oil in the boiler. Delaying the project for up to 18 months will not conflict with the provisions of this permit. Please, refer to the construction conditions stated in the cover letter for the Significant Source Modification 163-18031.

IDEM, OAQ has made the following changes to the source modification and permit modification:

1. The following condition was included in the Construction Condition of the Source Modification letter, as they are applicable for facilities subject to the New Source Performance Standards (NSPS) and was numbered 7:
  7. **NSPS Notification and Reporting Requirements**  
**Pursuant to Part 60.7, the Permittee is hereby advised of the requirement to report the following at the appropriate times:**
    - (a) **Boiler No. 5 and storage tank (OT01) commencement of construction date (no later than 30 days after such date);**
    - (b) **Boiler No. 5 and storage tank (OT01) actual date of initial start-up (within 15 days after such date); and**
    - (c) **Boiler No. 5 date of performance testing (at least 30 days prior to such date), when required by a condition elsewhere in this permit.**

**Reports are to be sent to:**

**Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, IN 46206-6015**

**Evansville Environmental Protection Agency  
C.K. Newsome Community Center  
100 East Walnut Street Suite 100  
Evansville, Indiana 47713**

**The application and enforcement of these standards have been delegated to the IDEM, OAQ. The requirements of 40 CFR Part 60 are also federally enforceable.**

2. The following was also added in Condition D.2.12 Record Keeping Requirements of both source and permit modifications for Boilers No. 3 and No.5, as it is applicable for facilities subject to the NSPS:

**D.2.12 Record Keeping Requirements**

- 
- (a) Pursuant to 40 CFR Part 60.48c, and to document compliance with Condition D.2.2 and

D.2.3, the Permittee shall maintain records in accordance with (1) through (3) below.

- (1) Calendar dates covered in the compliance determination period;
- (2) Each 30-day average SO<sub>2</sub> emission rate (nj/J or lb/ million Btu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.
- (3) Records of fuel supplier certification as described below:
  - (A) The name of the oil supplier; and that the oil complies with the specifications under the definition of distillate oil in 40 CFR Part 60.41c .

In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period. Fuel supplier certification shall include the following information:

- (A) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
  - (B) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; ~~and~~
- (b) **Pursuant to 40 CFR Part 60.7, the Permittee shall maintain records of occurrences and duration of any startup, shutdown, or malfunction in the operation of Boilers No. 3 and No. 5.**
- ~~(b)~~ (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

1. Condition D.2.7 of the source modification and permit modification was re-written for clarification reason:

**D.2.7 Testing Requirements [326 IAC 2-7-6(1),(6)]**

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~~The Permittee is not required to test this facility by this permit.~~ **Except as provided by Condition D.2.10, this permit does not require a performance testing.** However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the Particulate Matter, NO<sub>x</sub> or SO<sub>2</sub> limits specified in Conditions D.2.1, D.2.2, D.2.3 and D.2.4 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

**Indiana Department of Environmental Management  
Office of Air Quality**

**Technical Support Document (TSD) for a Part 70 Significant Source  
Modification and Significant Permit Modification**

**Source Background and Description**

<b>Source Name:</b>	Whirlpool Corporation, Evansville, Indiana
<b>Source Location:</b>	5401 U.S. Highway 41 North, Evansville, Indiana
<b>County:</b>	Vanderburgh
<b>SIC Code:</b>	3632, 3585
<b>Operation Permit No.:</b>	T 163-7467-00022
<b>Operation Permit Issuance Date:</b>	July 13, 1999
<b>Significant Source Modification No.:</b>	163-18031
<b>Significant Permit Modification No.:</b>	163-18065
<b>Permit Reviewer:</b>	Aida De Guzman

The Office of Air Quality (OAQ) has reviewed an application from Whirlpool Corporation, Evansville, Indiana relating to the installation of one storage tank and modification of the following existing emission units and pollution control devices:

- (a) One (1) existing natural gas-fired boiler (Boiler No. 5), with the capability to burn no. 2 fuel oil as back-up, identified as EU7, rated at ninety-two and seven-tenths million British thermal units per hour (92.7 MMBtu/hr), and exhausting to stack S7. (Inst. 1973, mod. 1997).

Boiler No. 5 was issued a construction permit to burn no. 2 fuel oil, and this permit was incorporated in the issued Part 70 permit. The construction permit became voided, as source never completed the modification of the boiler to burn no. 2 fuel oil, and so an Administrative Amendment (163-15849) was issued to eliminate the use of this fuel. The source has now decided to modify the boiler to accommodate the use of No. 2 fuel oil as back-up.

- (b) Proposed installation of one (1) aboveground horizontal fixed-roof distillate fuel oil storage tank, identified as Oil Tank 1 (OT01) with a capacity of 15,000 gallons.

**History**

On August 11, 2003, Whirlpool Corporation, Evansville, Division submitted an application to the OAQ requesting to install a storage tank and modify their existing boiler no. 5. Whirlpool Corporation was issued a Part 70 permit (T163-7467-00022) on July 13, 1999.

## Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) Part 70 Operating Permit T163-7467-00022, issued on July 14, 1999;
- (b) First Administrative Amendment 163-11817, issued on April 27, 2000;
- (c) Reopening 163-13511, issued on February 7, 2002;
- (d) Second Administrative Amendment 163-13859, issued on March 14, 2001;
- (e) Third Administrative Amendment 163-15849, issued May 3, 2002;
- (f) Fourth Administrative Amendment 163-15738, issued on July 2, 2002;
- (g) Fifth Administrative Amendment 163-16495, issued on September 4, 2002; and
- (h) First Significant Permit Modification 163-16557, issued on December 12, 2002

## Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on August 11, 2003.

## Emission Calculations

- (a) Distillate Fuel Oil Storage Tank, identified as Oil Tank 1 (OT01): See attached Tanks 4.0 Program Spreadsheets for detailed emission calculations.
- (b) Boilers No. 3:  
No emission change will result from this boiler since no physical change and operational change will be made to it.
- (c) Boiler No. 5:  
Boiler No. 5 will be reconfigured to have the capability to burn fuel oil no. 2 as a back-up fuel. Natural gas is still the primary fuel.

BOILER NO. 5 SUMMARY OF EMISSIONS (TONS/YEAR)						
FUEL	PM	PM10	SO2	NOX	VOC	CO
Natural Gas	0.8	3.1	0.2	73.1	2.2	34.1
No. 2 Fuel Oil with 0.5% Sulfur Content	5.8	5.8	205.9	81.2	0.6	14.5
No. 2 Fuel Oil with 0.05% Sulfur Content	5.8	5.8	20.6	81.2	0.6	14.5

- (a) Future Potential to Emit (see page 1 through 6 of 6 TSD App A):  
Using the worst case fuel

Future PTE SO <sub>2</sub> (0.5% worst case)	=	205.9 tons/year
Future PTE NO <sub>x</sub> (0.5% worst case)	=	81.2 tons/year

- (b) Actual Emissions:  
 CY 2001 natural gas usage - 46.13 MMCF/year  
 CY 2002 natural gas usage - 170.34 MMCF/year  
  
 2-year Average usage - 108.235 MMCF/year

Boiler No. 5 Actual Average Emissions for CY2001/2002											
PM		PM10		SO <sub>2</sub>		NO <sub>x</sub>		CO		VOC	
Emission Factor (lb/MMCF)	Emissions (tons/yr)	Emission Factor (lb/MMCF)	Emissions (tons/yr)	Emission Factor (lb/MMCF)	Emissions (tons/yr)	Emission Factor (lb/MMCF)	Emissions (tons/yr)	Emission Factor (lb/MMCF)	Emissions (tons/yr)	Emission Factor (lb/MMCF)	Emissions (tons/yr)
1.9	0.1	7.6	0.4	0.6	0.0	180 *	9.24	84	4.5	5.5	0.3

Note: \* - based on the burner design capability (0.18 lb/mmBtu or 180 lb/MMCF).

- (c) Modification Emission = Future PTE - Past Actual  
 (Based on the worst case fuel which is fuel oil no. 2 with 0.5% sulfur content)

$$\begin{aligned} \text{SO}_2 &= 205.9 \text{ tons/yr} - 0.0 \\ &= 205.9 \text{ tons/yr} \end{aligned}$$

$$\begin{aligned} \text{NO}_x &= 81.2 \text{ tons/yr} - 9.24 \text{ tons/yr} \\ &= 71.96 \text{ tons/yr} \end{aligned}$$

The modification of Boiler No.5 is major for SO<sub>2</sub> (205.9 tons/yr) and NO<sub>x</sub> (71.96 tons/yr) since both pollutants are emitted at greater than 40 tons/yr. Five (5) year contemporaneous emission changes will be evaluated.

- (d) Contemporaneous Period (1998 through 2003):  
 There are no contemporaneous emission changes that have occurred for the last 5 years.

- (e) Net Emission Increase  

$$\begin{aligned} \text{SO}_2 &= 205.9 \text{ tons/yr} - 0.0 \\ &= 205.9 \text{ tons/yr} \end{aligned}$$

$$\begin{aligned} \text{NO}_x &= 71.96 \text{ tons/yr} - 0.0 \\ &= 71.96 \text{ tons/yr} \end{aligned}$$

- (f) Limited Emissions:  
 SO<sub>2</sub> is emitted at 205.9 tons/yr and NO<sub>x</sub> at 71.96 tons/yr, which are greater than the major levels of 40 ton/year. The source requested a limit of < 40 tons of NO<sub>x</sub> per year plus 9.24 tons/yr actual NO<sub>x</sub> emissions to avoid the applicability of 326 IAC 2-2, Prevention of Significant Deterioration (PSD).

**Natural Gas Usage Limit (Primary Fuel):**

$\frac{49.24 \text{ tons/yr limit}}{73.1 \text{ tons/yr NO}_x \text{ Potential}} * 812.1 \text{ MMCF/yr Pot'l} = < 547 \text{ MMCF of N.G./yr}$

**Fuel Oil No. 2 Usage Limit (Secondary Fuel):**

For 0.5% sulfur content:

$\frac{40 \text{ tons/yr SO}_2 \text{ limit}}{205.9 \text{ tons/yr SO}_2 \text{ Potential}} * 5800.37 \text{ kgal/yr Pot'l} = < 1126 \text{ kgal of F.O.2/yr}$

**Fuel (Natural Gas and Fuel Oil No. 2) Equivalency:**

Using 0.5% Sulfur Content Fuel Oil No. 2 (F.O. 2):

$$71 \text{ lb/kgal} * \text{MMCF} / 0.6 \text{ lb} = \frac{118 \text{ MMCF of N.G.}}{\text{Kgal of F.O.2}}$$

Using 0.05% Sulfur Content of Fuel Oil (F.O.2):

$$7.1 \text{ lb/kgal} * \text{MMCF} / 0.6 \text{ lb} = \frac{11.8 \text{ MMCF of N.G.}}{\text{Kgal of F.O.2}}$$

**Fuel (Fuel Oil No.2 @ 0.5% and 0.05% sulfur content) Equivalency:**

$$\frac{71 \text{ lb}}{\text{kgal of 0.5\%}} * \frac{\text{kgal of 0.05\%}}{7.1 \text{ lb}} = \frac{10 \text{ kgal of 0.05\% F.O.2}}{\text{Kgal of 0.5\% F.O.2}}$$

**Potential To Emit of Modification**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	5.8
PM-10	5.8
SO <sub>2</sub>	205.9
VOC	2.2
CO	34.1
NO <sub>x</sub>	81.2

HAP's	Potential To Emit (tons/year)
Arsenic	1.62E-03
Beryllium	1.22E-03
Cadmium	1.22E-03
Chromium	1.22E-03

Lead	3.65E-03
Mercury	1.22E-03
Manganese	2.44E-03
Nickel	1.22E-03
Selenium	6.09E-03
Benzene	8.527E-04
Dichlorobenzene	4.87E-04
Formaldehyde	3.04E-02
Hexane	7.30E-01
Toluene	1.38E-03
TOTAL	7.83E-01

### Justification for Modification

- (a) The Part 70 source is being modified through a Part 70 Significant Source Modification, pursuant to 326 IAC 2-7-10.5(f) since the modification has a potential to emit greater than 25 tons per year Sulfur Dioxide (SO<sub>2</sub>) and Oxides of Nitrogen (NO<sub>x</sub>).
- (b) The Part 70 Permit is being modified through a Part 70 Significant Permit Modification, pursuant to 326 IAC 2-7-12(d), since significant change in the existing monitoring and reporting of the Part 70 permit will be made.

### County Attainment Status

The source is located in Vanderburgh County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	not determined

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Vanderburgh County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Vanderburgh County has been classified as attainment or unclassifiable for all the other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

### Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, taken from Significant Source Modification 163-15820-00022, issued on November 26, 2002):

Pollutant	Emissions (tons/year)
PM	0.50
PM-10	14.9
SO <sub>2</sub>	74.6

VOC	619.7
CO	11.7
NO <sub>x</sub>	40.2
Ozone Depleting Substance (ODS)	55.78

This existing source is a major stationary source because an attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.

### Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)					
Process/facility	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>
Boiler No. 5 Modification	5.5	5.8	205.9	2.2	34.1	81.2
Contemporaneous Increases	0.0	0.0	0.0	0.0	0.0	0.0
Net Emission Increase	5.8	5.8	205.9	2.2	34.1	81.2
Modification Limited Emissions	0.5	2.1	< 40*	1.5	23.0	<40*
PSD Significant Levels	25	15	40	40	100	40

Sourcewide PTE Before Modification	0.50	14.9	74.6	619.7	11.7	40.2
Sourcewide PTE After Modification	< 1.6	< 16	<114.6	< 620.13	< 18.7	< 80.2

\* SO<sub>2</sub> - the two (2) yr- actual average emission is zero.

\* NO<sub>x</sub> - the two (2) yr- actual average emission is 9.24 tons/yr, and this emission is not reflected on this table.

- (a) This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Limits:

Since the natural gas fuel was limited to 547 MMCF/yr to restrict the SO<sub>2</sub> and NO<sub>x</sub> to < 40

tons/year plus the actual average emissions, the rest of the criteria pollutants will also be scaled down based on this fuel limit.

@547 MMCF/yr	PM	PM10	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO
PTE (tons/yr)	0.5	2.1	< 40.0	< 40 + 9.24 actual	1.5	23.0

### Federal Rule Applicability

(a) New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60).

- (1) 326 IAC 12, 40 CFR Part 60.110b, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels). This rule applies for each storage vessel with a capacity greater than or equal to 40 cubic meters (10,567 gallons) for which construction, reconstruction or modification, commenced after July 23, 1984.

The proposed one (1) aboveground horizontal fixed-roof distillate fuel oil storage tank, identified as Oil Tank 1 (OT01) with a capacity of 15,000 gallons is subject to the requirements of Part60.116b(a) and (b). Section (b) requires the owner or operator of this Oil Tank 1 (OT01) to keep readily accessible records showing the dimension of this tank and an analysis showing its capacity.

Section (a) requires the owner or operator of this tank to keep copies of the records required in Section (b) of this rule for the life of the tank.

- (2) 326 IAC 12, 40 CFR Part 60.40c, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. This rule is applicable to each steam generating units for which construction, modification or reconstruction commence after June 9, 1989, and that has a maximum design heat input capacity of 100 million British thermal units per hour (mmBtu/hr) or less but greater than 10 mmBtu/hr.

Boiler No. 3 (33.5 mmBtu/hr Heat Input):

Although no physical or operational modification will be made to Boiler No. 3, the following requirements under this NSPS are applicable to this boiler since these requirements were overlooked in the previous permits:

The following requirements of the NSPS shall apply to the 92.7 mmBtu/hr Boiler No. 5 and the 33.5 mmBtu/hr Boiler No.3:

- (A) Pursuant to Section 60.42c(d), the owner or operator of the 92.7 mmBtu/hr Boiler No. 5 and the 33.5 mmBtu/hr Boiler No.3 shall not discharge into the atmosphere SO<sub>2</sub> in excess of 0.5 pounds per million Btu heat input when burning No. 2 distillate fuel oil or, as an alternative, shall not combusts in Boiler No. 5 distillate fuel oil that contains greater than 0.5 weight percent (%) sulfur.
- (B) Pursuant to Section 60.42c(h), compliance with the emission limit or fuel oil sulfur limits may be determined based on a certification from the fuel supplier.

- (C) Pursuant to Section 60.42c(i), Standard for Sulfur Dioxide, the SO<sub>2</sub> emission limits, and fuel oil sulfur limits, under this section shall apply at all times, including periods of startup, shutdown, and malfunction.
- (D) Pursuant to Section 60.43c(c), Standards for Particulate matter, the owner or operator of the 92.7 mmBtu/hr Boiler No. 5 and the 33.5 mmBtu/hr Boiler No.3 shall not cause to be discharged into the atmosphere from this boiler any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. The PM and opacity standards under this section shall apply at all times, except during periods of startup, shutdown, or malfunction.

The owner or operator shall conduct initial performance test for boiler no. 5 as required under Section 60.8 and shall conduct subsequent tests as required by IDEM, OAQ to demonstrate compliance with opacity limit using EPA Method 9.

Boiler no. 3 has conducted an initial performance test for opacity on September 30, 1998, per CP 163-8917-00022.

- (E) Pursuant to Section 60.44c Compliance and Performance Methods of this NSPS, to demonstrate compliance with the fuel oil sulfur limits based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in Boiler No. 5 and the Boiler No. 3 to demonstrate that the oil contains 0.5 weight percent sulfur or less. The Permittee may also choose to demonstrate compliance with SO<sub>2</sub> standards based on fuel supplier certification, or shall sample the oil in the fuel tank after each new shipment of oil is received and before oil is combusted. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of the subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.
- (F) Pursuant to Sec. 60.48c, Reporting and Record keeping Requirements, the owner or operator of Boiler No. 5 and Boiler No.3 subject to the SO<sub>2</sub> emission limits of Sec. 60.42c, shall submit to the Administrator the performance test data from the initial and any subsequent performance tests.

The owner or operator of Boiler No. 5 and Boiler No.3 subject to the SO<sub>2</sub> emission limits and fuel oil sulfur limits, under Sec. 60.42c shall submit reports to the Administrator. Under Sec. 60.43c the owner or operator of the boiler shall keep records and submit reports as required under paragraph (d) of this rule section, including the following information, as applicable:

- (1) Calendar dates covered in the reporting period.
- (2) Each 30-day average SO<sub>2</sub> emission rate (nj/J or lb/ million Btu), or 30-day average sulfur content (weight percent), calculated

during the reporting period, ending with the last 30-day period;  
reasons for any noncompliance with the emission standards; and  
a description of corrective actions taken.

- (3) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph (f)(1), (2), or (3) of this rule section, as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period. (f) Fuel supplier certification shall include the following information: (1) For distillate oil:

- (a) The name of the oil supplier; and  
(b) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in Sec. 60.41c.

The owner or operator of Boiler No. 5 and Boiler No.3 shall record and maintain records of the amounts of each fuel combusted during each month. The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

- (b) National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63).
- (1) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.
- (c) National Emission Standards for Hazardous Air Pollutants, 326 IAC 14, (40 CFR 60. There are no NESHAPs applicable to these boilers.

#### State Rule Applicability - Individual Facilities

- (a) 326 IAC 2-2 (Prevention of Significant Deterioration)  
The source is an existing major source (see Source Status Table on page 5 of this TSD). The modification to Boiler No. 5 is not major for PSD review, since its SO<sub>2</sub> and NO<sub>x</sub> emissions are both limited to less than the PSD significant level of 40 tons per year. Therefore, 326 IAC 2-2 is not applicable.
- (b) The following rule requirements which were previously applied to Boiler No. 5 will stay the same and will not be affected by this modification.
- (1) 326 IAC 6-2 (PM Emission Limitation for Source of Indirect Heating)

Pursuant to 326 IAC 6-2-4 (PM Emission Limitations), the allowable PM emission rate from the 92.7 mmBtu/hr Boiler No.5 shall be limited using the following equation:

$$\begin{aligned} P_t &= \frac{1.09}{Q^{0.26}} \\ &= 0.27 \text{ mmBtu/hr} \end{aligned}$$

Where:  $P_t$  = rate of emission in pounds per million British thermal units heat input.

$$\begin{aligned} Q &= \text{total source maximum operating capacity in mmBtu/hr} \\ &= 92.7 + 33.5 + 85 \end{aligned}$$

= 211.2 mmBtu/hr

The 92.7 mmBtu/hr is in compliance with 326 IAC 6-2-4 as shown in the calculations below:

Using Natural Gas as Fuel:

$0.8 \text{ tons PM/yr} * 2000 \text{ lb/ton} * \text{hr} / 92.7 \text{ mmBtu} * \text{yr} / 8760 \text{ hrs} = 0.002 \text{ lb/mmBtu} < 0.27 \text{ lb/mmBtu}$

Using Fuel Oil No.2 as Fuel:

$5.8 \text{ tons PM/yr} * 2000 \text{ lb/ton} * \text{hr} / 92.7 \text{ mmBtu} * \text{yr} / 8760 \text{ hrs} = 0.014 \text{ lb/mmBtu} < 0.27 \text{ lb/mmBtu}$

The 92.7 mmBtu/hr Boiler No.5, is in compliance using both fuels.

- (2) 326 IAC 7-1.1-1 (SO<sub>2</sub> Emission Limitations)  
Pursuant to 326 IAC 7-1.1-1 (SO<sub>2</sub> Emission Limitations) the SO<sub>2</sub> emissions from the 92.7 mmBtu/hr Boiler No. 5 shall not exceed five-tenths (0.5) pounds per million Btu/ of heat input.

### Changes to the Part 70 Permit

The Part 70 permit will be modified to incorporate the changes to Boiler No. 5, due to its reconfiguration to have the capability to burn fuel oil no.2; and the changes to the monitoring, record keeping and reporting requirements for Boiler No. 3 . Modification is as follows (additions are **bolded** and deletions are ~~struck through~~ for emphasis):

#### SECTION D.2

#### FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (1) One (1) natural gas fired boiler (Boiler No. 2), with the capability to burn no. 2 fuel oil as back-up, identified as EU4, rated at eighty-five million British thermal units per hour (85 MMBtu/hr), and exhausting to stack S4. (August 1988)
- (2) One (1) existing natural gas-fired boiler (Boiler No. 5), with the capability to burn **no. 2** fuel oil as back-up, identified as EU7, rated at ninety-two and seven-tenths million British thermal units per hour (92.7 MMBtu/hr), and exhausting to stack S7. (Inst. 1973, mod. 1997).
- (3) One (1) natural gas fired boiler (Boiler No. 3) with the capability to burn No. 2 fuel oil as back-up, identified as EU12, rated at thirty-three and five-tenths million British thermal units per hour (33.5 MMBtu/hr), and exhausting to stack S12. (Inst. 1997)
- (4) **One (1) aboveground horizontal fixed-roof distillate (No. 2) fuel oil storage tank, identified as Oil Tank 1 (OT01) with a capacity of 15,000 gallons.**

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

##### D.2.1 Particulate Matter (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (PM Emission Limitations for Source of Indirect Heating, constructed after September 21, 1983), the allowable PM emission rate from the 85 mmBtu/hr Boiler No. 2, **92.7 mmBtu/hr Boiler No. 5**, and 33.5 mmBtu/hr Boiler No. 3 shall not exceed twenty-seven hundredths (0.27) pounds per million British thermal units (lb/mmBtu).

##### D.2.2 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-1]

Pursuant to 326 IAC 7-1.1 (SO<sub>2</sub> Emissions Limitations) the SO<sub>2</sub> emissions from the **92.7 MMBtu/hr natural gas fired boiler (Boiler No. 5)**, and the 33.5 mmBtu/hr natural gas-fired boiler (Boiler No.3) when burning No. 2 distillate fuel oil, shall not exceed five-tenths (0.5) pounds per million Btu of heat input.

##### D.2.3 PSD Minor Modification Limit [326 IAC 2-2]

- (a) Pursuant to CP-163-8917-00022, issued on December 23, 1997, the input of fuel oil No. 2 ~~distillate fuel oil~~ to the 33.5 MMBtu/hr boiler (Boiler No. 3) shall be limited to 1,100,000 gallons per ~~365 twelve-consecutive-day month period, rolled on a daily basis with~~

**compliance demonstrated at the end of each month.** This ~~production fuel usage~~ limitation is equivalent to SO<sub>2</sub> emissions of 39 tons per ~~twelve consecutive day month period~~ 365 consecutive day period, rolled on a daily basis. Therefore, the PSD rules, 326 IAC 2-2, shall not apply. **Compliance with this limit shall make 326 IAC 2-2, Prevention of Significant Deterioration (PSD) not applicable.**

During the first 365 days of operation, the No. 2 distillate fuel oil input shall be limited such that monthly fuel input to the 33.5 million Btu per hour boiler No. 3 shall not exceed 91,600 gallons.

- (b) The input of natural gas fuel to the 92.7 MMBtu/hr Boiler No. 5, when using only this fuel shall be limited to less than 547 million cubic feet (MMCF) per twelve consecutive month period, with compliance demonstrated at the end of each month. This input fuel limitation shall restrict the Oxides of Nitrogen (NO<sub>x</sub>) emissions to less than 49.24 tons per twelve month period. Compliance with this limit shall make 326 IAC 2-2, Prevention of Significant Deterioration (PSD) not applicable.
- (c) The input fuel oil No. 2 to the 92.7 MMBtu/hr Boiler No. 5 shall be limited to less than 1,126,000 gallons (1,126 kgal) per twelve consecutive month period, with compliance demonstrated at the end of each month. This input fuel oil limit shall be based on a limit of 0.5% sulfur content of the fuel oil. This input fuel limitation shall restrict the Sulfur Dioxide (SO<sub>2</sub>) emissions to less than 40 tons per twelve month period. Compliance with this limit shall make 326 IAC 2-2, Prevention of Significant Deterioration (PSD) not applicable.

**D.2.4 New Source Performance Standard (NSPS) [326 IAC 12 and 40 CFR 60, Subpart Dc]**

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- (a) Pursuant to 326 IAC 12 and 40 CFR 60.42c(d), ~~through 60.48c, Subpart Dc,~~ the owner or operator of the 33.5 MMBtu/hr boiler (Boiler No. 3) **and the 92.7 MMBtu/hr Boiler No. 5** shall not discharge into the atmosphere SO<sub>2</sub> in excess of 0.5 pounds per million Btu heat input or, as an alternative, shall not combust in the boiler No. 2 distillate fuel oil that contains greater than 0.5 weight percent sulfur. If the owner or operator elects to demonstrate compliance with the sulfur content limit using fuel analysis, operation condition ~~D-2-6~~ **D.2.8** must be met;
- (b) Pursuant to Section 60.42c(i), Standard for Sulfur Dioxide, the SO<sub>2</sub> emission limits, and fuel oil sulfur limits, under this section shall apply at all times, including periods of startup, shutdown, and malfunction.

**D.2.5 New Source Performance Standard (NSPS) [326 IAC 12 and 40 CFR 60, Subpart Dc]**

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Pursuant to Section 60.43c(c), Standards for Particulate matter, the owner or operator of the 92.7 mmBtu/hr Boiler No. 5 and the 33.5 mmBtu/hr Boiler No.3 shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. The PM and opacity standards under this section shall apply at all times, except during periods of startup, shutdown, or malfunction.

**D.2.6 New Source Performance Standard (NSPS) [326 IAC 12 and 40 CFR 60, Subpart Kb]**

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Pursuant to 326 IAC 12 and 40 CFR Part 60.110b, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels), the owner or operator of one (1) aboveground horizontal fixed-roof distillate (No. 2) fuel oil storage tank, identified as Oil Tank 1 (OT01) shall: (a) keep readily accessible records showing the dimension of the storage tank and an analysis showing the capacity; and (b) keep records required in (a) of this condition for the life of the tank.

**Compliance Determination Requirements**

**D.2.7 Testing Requirements [326 IAC 2-7-6(1),(6)]**

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The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the Particulate Matter, **NO<sub>x</sub>** or SO<sub>2</sub> limits specified

in Conditions D.2.1, D.2.2, **D.2.3** and D.2.4 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

**D.2.8 SO<sub>2</sub> and NO<sub>x</sub> Emission Limit (Prevention of Significant Deterioration (PSD)) [326 IAC 2-2]**

The natural gas and fuel oil No. 2 used by the 92.7 MMBtu/hr Boiler No. 5, and the 33.5 mmBtu/hr Boiler No.3 shall have the following fuel equivalency:

- (a) For every 118 million cubic feet of natural gas burned, shall be equivalent to one (1) kgal of fuel oil no. 2 with sulfur content of 0.5%
- (b) For every 11.8 million cubic feet of natural gas burned, shall be equivalent to one (1) kgal of fuel oil no. 2 with sulfur content of 0.05%
- (c) For every 10,000 gallons (10 kgal) of fuel oil no. 2 with sulfur content of 0.05%, shall be equivalent to one (1) kgal of fuel oil no. 2 with sulfur content of 0.5%.
- (d) Compliance with sections (a) through (c) of this condition, and Condition D.2.3 shall make 326 IAC 2-2, Prevention of Significant Deterioration (PSD) not applicable.

**D.2.9 Sulfur Dioxide Emissions and Sulfur Content**

Compliance shall be determined utilizing one of the following options.

- (a) **Pursuant to Section 60.44c of NSPS Subpart Dc** and 326 IAC 3-7-4, the Permittee shall demonstrate that the fuel oil sulfur content does not exceed five-tenths percent (0.5%) by weight by:
  - (1) Providing fuel supplier certification. The performance test shall consist of the certification from the fuel supplier and shall include the following information:
    - (a) The name of the oil supplier; and
    - (b) A statement from the oil supplier that the oil complies with specifications under the definition of distillate oil in §60.41c.
  - or
  - (2) Analyze the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
    - (A) Oil samples shall be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
    - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling;
  - or
- (b) **Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the ninety-two and seven-tenths million British thermal units per hour (92.7 MMBtu/hr) heat input boiler, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.**

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

**D.2.10 NSPS Testing Requirement**

Pursuant to the NSPS, Subpart Dc, a compliance opacity test shall be performed on the **92.7 mmBtu/hr Boiler No. 5 within 60 days after burning No. 2 fuel oil as the back-up fuel**. This test shall be performed according to 326 IAC 3-2.1 (Source Sampling Procedures) using the methods specified in the rule. This performance test shall be conducted in accordance with Section C - Performance Testing.

## Compliance Monitoring Requirements [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

### D.2.8 11 Visible Emissions Notations

- (a) Daily visible emission notations of the Boiler No. 3 and Boiler No. 5 stacks exhaust shall be performed during normal daylight operations when burning fuel oil and exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

## Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

### ~~D.2.9 Record Keeping Requirements~~

- ~~(a) To document compliance with Condition D.2.1 and D.2.2, the Permittee shall maintain records in accordance with (1) through (6) below:~~
  - ~~(1) Calendar dates covered in the compliance determination period;~~
  - ~~(2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;~~
  - ~~(3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and~~
  - ~~If the fuel supplier certification is used to demonstrate compliance, the following, as a minimum, shall be maintained:~~
    - ~~(4) Fuel supplier certifications;~~
    - ~~(5) The name of the fuel supplier; and~~
    - ~~(6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.~~
  - ~~The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.~~
- ~~(b) Pursuant to 326 IAC 12, and 40 CFR 60.48c (g), the Permittee shall:~~
  - ~~(A) maintain monthly records at the source of the following values in order to determine compliance with operation condition D.2.2:~~
    - ~~(i) Total amount of No. 2 distillate fuel oil used;~~
    - ~~(ii) Average sulfur content of No. 2 distillate fuel oil used;~~
    - ~~(iii) Average higher heating value of the No. 2 distillate fuel oil used;~~

- ~~(iv) Average sulfur dioxide emission rate (expressed in pounds per million Btu).~~
- ~~Records of sulfur content and higher heating value can be determined by information as obtained by the vendor. As long as the certified vendor analysis indicates that the sulfur content is less than 0.5 percent and the higher heating value of the fuel oil delivered is greater than 140,000 Btu per gallon, the Permittee can note "less than 0.5 percent" and "greater than 140,000 Btu per gallon" for items (ii) and (iii) respectively.~~
- ~~(B) maintain records at the source of the daily No. 2 distillate fuel oil usage in order to determine compliance with operation condition D.2.3.~~
- ~~(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.~~

#### **D.2.10 Reporting Requirements**

- ~~(a) A quarterly summary of the information to document compliance with Condition D.2.3, shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.~~
  - ~~(i) For the first 365-day period, these reports shall include the calendar month No. 2 distillate fuel oil consumption.~~
  - ~~(ii) For the succeeding 365-day periods, these reports shall include the following:~~
    - ~~(A) Daily No. 2 distillate fuel oil consumption; and~~
    - ~~(B) No. 2 distillate fuel oil consumption for previous 365-day period.~~
- ~~(b) A summary to document compliance with operation condition D.2.2 shall be submitted upon request to the address listed in (a), within thirty (30) days after the day of the request. These reports shall include items (i) through (iv) of operation condition D.2.9(b).~~
- ~~(c) Unless otherwise specified in this permit, any notice, report, or other submissions required by this permit shall be timely if:~~
  - ~~(i) Postmarked on or before the date it is due; or~~
  - ~~(ii) Delivered by any other method if it is received and stamped by IDEM, OAM, and Evansville EPA, on or before the date it is due.~~
- ~~(d) All instances of deviations from any requirements of this permit must be clearly identified in such reports.~~
- ~~(e) Any corrective actions taken as a result of an exceedance of a limit, an excursion from the parametric values, or a malfunction that may have caused excess emissions must be clearly identified in such reports.~~
- ~~(f) The first report shall cover the periods commencing the postmarked submission date of the Affidavit of Construction.~~
- ~~(g) The Permittee shall certify, on the form provided, that natural gas was fired in the boilers at all times during the report period. This certification shall be included when submitting the Annual Compliance Certification Letter.~~

#### **D.2.12 Record Keeping Requirements**

- (a) Pursuant to 40 CFR Part 60.48c, and to document compliance with Condition D.2.1 and D.2.2, the Permittee shall maintain records in accordance with (1) through (6) below.**

- (1) Calendar dates covered in the compliance determination period;**
- (2) Each 30-day average SO<sub>2</sub> emission rate (nj/J or lb/ million Btu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.**
- (3) Records of fuel supplier certification as described below:**
  - (A) The name of the oil supplier; and that the oil complies with the specifications under the definition of distillate oil in 40 CFR Part 60.41c.**

In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period. Fuel supplier certification shall include the following information:

- (A) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;**
- (B) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and**

~~Records of sulfur content and higher heating value can be determined by information as obtained by the vendor. As long as the certified vendor analysis indicates that the sulfur content is less than 0.5 percent and the higher heating value of the fuel oil delivered is greater than 140,000 Btu per gallon, the Permittee can note "less than 0.5 percent" and "greater than 140,000 Btu per gallon" for items (ii) and (iii) respectively.~~

- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.**

#### D.2.13 Reporting Requirements

- (a) A quarterly report of item (1) below to document compliance with Condition D.2.3, shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or their equivalent.**
  - (1) Natural gas and the fuel oil no.2 consumption for Boilers no. 3 and No. 5. This report shall be submitted within thirty (30) days after the end of the quarter being reported.**
- (b) To document compliance with Operation Condition D.2.2, item (1) through (3) below shall be submitted upon request to the address listed in Section C - General Reporting Requirements, within thirty (30) days after the day of the request.**
  - (1) Calendar month average sulfur content on the fuel oil no. 2 as determined in the fuel mixture.**
  - (2) Calendar month average heating value of the fuel oil no. 2 used.**
  - (3) Calendar month average sulfur dioxide emission rate in pounds per million Btu.**
- (c) The owner or operator of Boiler No. 5 and Boiler No.3 subject to the SO<sub>2</sub> emission limits and fuel oil sulfur limits, shall submit quarterly reports to the Administrator.**

**Under Sec. 60.43c the owner or operator of the boiler shall keep records and submit reports by the 30<sup>th</sup> day following the end of the reporting period, which shall include the following information, as applicable:**

- (1) Calendar dates covered in the reporting period.**
- (2) Each 30-day average SO<sub>2</sub> emission rate (nj/J or lb/ million Btu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.**
- (3) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described in item (1) and (2) below, must be reported. In addition the records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period. Fuel supplier certification shall include the following information:**
  - (A) The name of the oil supplier; and**
  - (B) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in Sec. 60.41c.**
- (4) The owner or operator of Boiler No. 5 and Boiler No.3 shall record and maintain records of the amounts of each fuel combusted during each month. All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record. The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.**
- (d) All records required under this Operation Condition D.2.10 shall be maintained by the owner or operator of the affected facility for a period of five (5) years following the date of such record. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period**
- (e) Unless otherwise specified in this permit, any notice, report, or other submissions required by this permit shall be timely if:**
  - (1) Postmarked on or before the date it is due; or**
  - (2) Delivered by any other method if it is received and stamped by IDEM, OAQ, and Evansville EPA, on or before the date it is due.**
- (f) All instances of deviations from any requirements of this permit must be clearly identified in such reports.**
- (g) Any corrective actions taken as a result of an exceedance of a limit, an excursion from the parametric values, or a malfunction that may have caused excess emissions must be clearly identified in such reports.**
- (h) The Permittee shall certify, on the form provided, if natural gas was fired in Boiler No. 5 at all times during the report period. This certification shall be included when submitting the Annual Compliance Certification Letter.**

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF AIR MANAGEMENT  
 COMPLIANCE DATA SECTION  
 AND  
 CITY OF EVANSVILLE ENVIRONMENTAL PROTECTION AGENCY**

**Part 70 Quarterly Report**

Source Name: Whirlpool Corporation  
 Source Address: 5401 U.S. 41 North, Evansville, Indiana 47727  
 Mailing Address: 5401 U.S. 41 North, Evansville, Indiana 47727  
 Part 70 Permit No.: T163-7467-00022  
 Facility: 33.5 million Btu per hour boiler No. 3 (ID# EU-12)  
 Parameter: SO<sub>2</sub>  
 Limit: 1,100,000 gallons (1,100 kgal) of Fuel Oil No. 2 per twelve month consecutive period.

Quarter \_\_\_\_\_ Year: \_\_\_\_\_

Month	Fuel Type	%Sulfur Content of Fuel Oil No. 2	Fuel Oil No.2 Usage This Month	Equivalent Fuel Usage This Month	TOTAL Fuel Oil No.2 & Equivalent Fuel Usage This Month	Fuel Oil No. 2 Usage for Previous 11 Months (kgal)	Equivalent Fuel Usage for Previous 11 Months (kgal)	TOTAL Fuel Oil No.2 & Equivalent Fuel Usage for Previous 11 Months (kgal)	Fuel Oil No.2 Usage 12 Month Total	Equivalent Fuel Usage 12 Month Total	Fuel Oil No.2 & Equivalent Fuel Usage 12 Month Total
1											
2											
3											

- (a) For every 118 million cubic feet of natural gas burned, shall be equivalent to one (1) kgal of fuel oil no. 2 with sulfur content of 0.5%  
 (b) For every 11.8 million cubic feet of natural gas burned, shall be equivalent to one (1) kgal of fuel oil no. 2 with sulfur content of 0.05%  
 (c) For every 10,000 gallons (10 kgal) of fuel oil no. 2 with sulfur content of 0.05%, shall be equivalent to one (1) kgal of fuel oil no. 2 with sulfur content of 0.5%.

Submitted by: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION  
AND  
CITY OF EVANSVILLE ENVIRONMENTAL PROTECTION AGENCY**

**Part 70 Quarterly Report**

**Source Name:** Whirlpool Corporation  
**Source Address:** 5401 U.S. 41 North, Evansville, Indiana 47727  
**Mailing Address:** 5401 U.S. 41 North, Evansville, Indiana 47727  
**Part 70 Permit No.:** T163-7467-00022  
**Facility:** 92.7 million Btu per hour Boiler No. 5 (ID# EU-7)  
**Parameter:** SO<sub>2</sub>  
**Limit:** 1,126,000 gallons (1,126 kgal) Fuel Oil No. 2 per twelve consecutive month period

Quarter: \_\_\_\_\_ Year: \_\_\_\_\_

Month	Fuel Type	%Sulfur Content of Fuel Oil No. 2	Fuel Oil No.2 Usage This Month	Equivalent Fuel Usage This Month	TOTAL Fuel Oil No.2 & Equivalent Fuel Usage This Month	Fuel Oil No. 2 Usage for Previous 11 Months (kgal)	Equivalent Fuel Usage for Previous 11 Months (kgal)	TOTAL Fuel Oil No.2 & Equivalent Fuel Usage for Previous 11 Months (kgal)	Fuel Oil No.2 Usage 12 Month Total	Equivalent Fuel Usage 12 Month Total	Fuel Oil No.2 & Equivalent Fuel Usage 12 Month Total
1											
2											
3											

- (a) For every 118 million cubic feet of natural gas burned, shall be equivalent to one (1) kgal of fuel oil no. 2 with sulfur content of 0.5%  
(b) For every 11.8 million cubic feet of natural gas burned, shall be equivalent to one (1) kgal of fuel oil no. 2 with sulfur content of 0.05%  
(c) For every 10,000 gallons (10 kgal) of fuel oil no. 2 with sulfur content of 0.05%, shall be equivalent to one (1) kgal of fuel oil no. 2 with sulfur content of 0.5%.

Submitted by: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION  
AND  
CITY OF EVANSVILLE ENVIRONMENTAL PROTECTION AGENCY**

**Part 70 Quarterly Report**

**Source Name:** Whirlpool Corporation  
**Source Address:** 5401 U.S. 41 North, Evansville, Indiana 47727  
**Mailing Address:** 5401 U.S. 41 North, Evansville, Indiana 47727  
**Part 70 Permit No.:** T163-7467-00022  
**Facility:** 92.7 million Btu per hour Boiler No. 5 (ID# EU-7)  
**Parameter:** NOx  
**Limit:** 547 MMCF of natural gas per twelve consecutive month period

**Quarter:** \_\_\_\_\_ **Year:** \_\_\_\_

Month	Column 1	Column 2	Column 1 + 2
	Natural Gas Usage This Month	Natural Gas Usage Past 11 Month	Natural Gas Usage 12 Month Total
Month 1			
Month 2			
Month 3			

**Submitted by:** \_\_\_\_\_

**Title/Position:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date** \_\_\_\_\_

## Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The following are compliance monitoring requirements applicable to the modification of the 92.7 mmBtu/hr Boiler No. 5:

(a) Visible Emissions Notations

- (1) Daily visible emission notations of the 92.7 mmBtu/hr Boiler No. 5 stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (2) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (3) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (4) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (5) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

## Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached **Part 70 Significant Source Modification No. 163-18031-00022** and operation subject to **Significant Permit Modification No.: 163-18065-00022**.